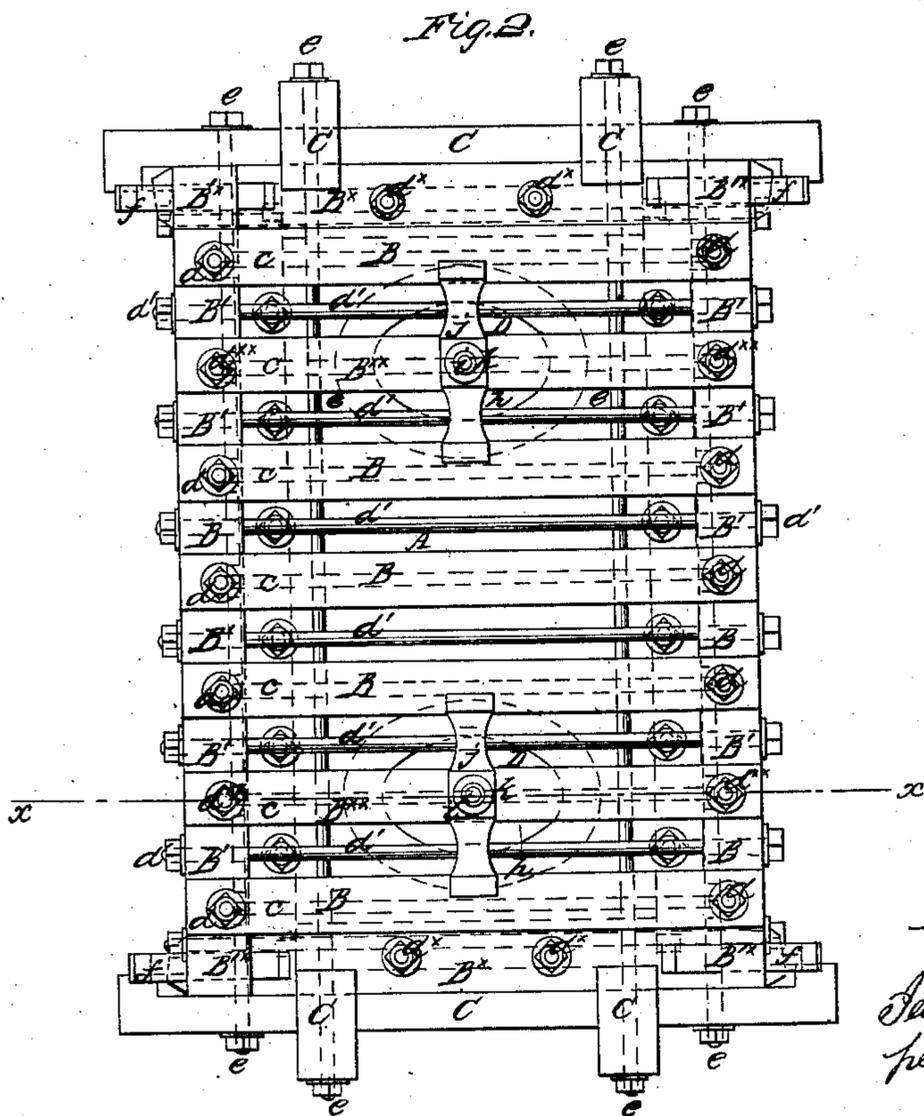
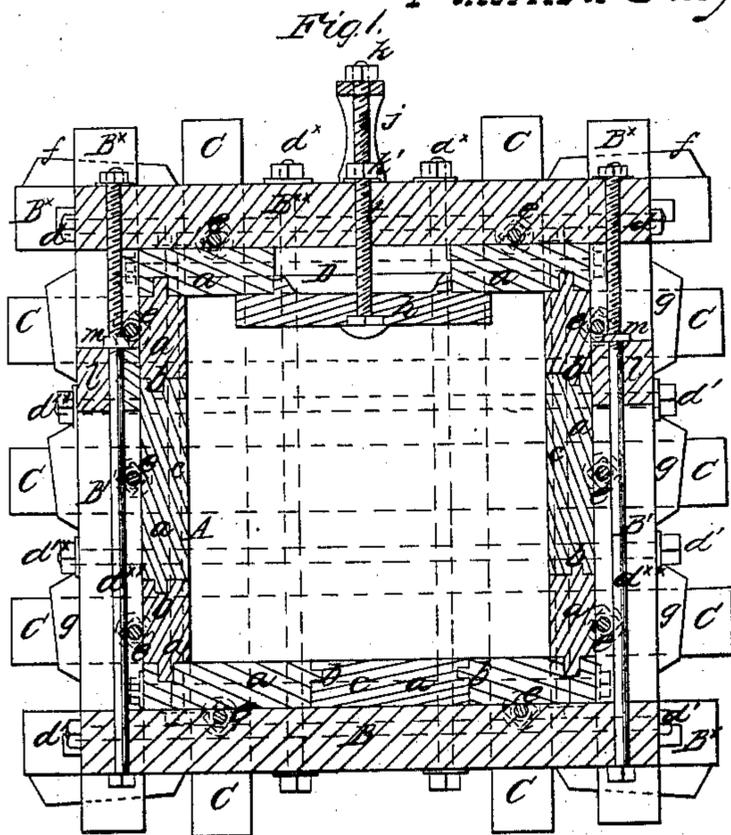


J. S. Wheat

Tan Vat

N^o 35,797.

Patented July 1, 1862.



*Witnesses:
J. W. Coombs
G. W. Reed*

*Inventor:
Jesse S. Wheat,
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UNITED STATES PATENT OFFICE.

JESSE S. WHEAT, OF WHEELING, VIRGINIA.

IMPROVED TANNING-VAT.

Specification forming part of Letters Patent No. 35,797, dated July 1, 1862.

To all whom it may concern:

Be it known that I, JESSE S. WHEAT, of Wheeling, in the county of Ohio and State of Virginia, have invented a new and Improved Pressure Tanning-Vat; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a transverse vertical section of my invention, taken in the plane indicated by the line *x x*, Fig. 2. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in constructing the shell of the vat with tongued and grooved joints and iron bolts running through the plank on the side of the tongues for the purpose of drawing the joints up tight whenever it becomes necessary.

It consists, also, in the arrangement of a series of framed timbers around the sides and on the ends of the vat with iron bolts or stirrups running through them crosswise and lengthwise of the vat in such a manner that the whole structure can be drawn together either side-wise or endwise, and at the same time the timbers which run across the man-holes and retain the man-hole covers can be removed and replaced at pleasure.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation, with reference to the drawings.

The shell A of my vat is made of planks *a*, which are fitted together by tongues and grooves *b*, as clearly shown in Fig. 1 of the drawings. By these means the joints between the several planks can be drawn up tight whenever desired, and the timber will preserve its full strength, or nearly so.

In order to increase the strength of the vat and to render the same capable of resisting any pressure to which it may be subjected, a series of framed timbers, B B' C, are arranged on the outside of the shell A, and secured to it by means of bolts or stirrups *d d' e*. The timbers B are placed across the top and bottom of the shell sufficiently far apart to admit between them the ends of the timbers B', and their ends extend beyond the edges of the

shell, so as to afford room for the bolts *d*. The timbers B' are placed on the sides of the shell A, and their ends alternate with the ends of the timbers B, as clearly shown in Fig. 2. They are secured by bolts *d'*, which pass through their ends, and which are fastened by means of nuts like the bolts *d*. The timbers B^x and B'^x on the corners are interlocked by means of mortises, and they are fastened together and tightened up by means of wedges *f* and by bolts *d^x d'^x*. The ends of the shell are strengthened by timbers C, which are secured by wedges *g* and bolts *e*. The several bolts *d d' e* are situated on the outside of the shell A, close to its sides, and they extend lengthwise and crosswise, so that by tightening said bolts the several sides of the vat can be drawn up tight.

D are the man-holes, which are situated under the timbers B^x, and which are closed by covers *h*. The screw-shanks *i*, which serve to draw the covers up tight, extend through the timbers B^x B^x and through bridges *j*, and nuts *k k'* serve to fasten the covers. The nuts *k'* bear directly on the timbers B^x and the nuts *k* on the bridges *j*, and when it is desired to open said covers the timbers B^x have to be removed. This is accomplished by taking off the nuts from the ends of those bolts which pass through the ends of said timbers, and by unscrewing the nuts *k* the bridges can be taken off, and if now the nuts *k'* are gradually unscrewed, the timbers B^x can be taken off and the covers can be removed. To prevent the bolts *d^x*, which pass through the ends of timbers B^x, from dropping down when said timbers are taken off, and to facilitate the operation of replacing the timbers, said bolts are made to pass through lugs *l*, that are secured to the sides of the shell or between two of the timbers B', and additional nuts, *m*, retain the bolts until the timbers B^x are replaced. The man-holes can thus be opened without disturbing any other bolts but those passing through the ends of the timbers B^x, and these timbers can be removed and replaced without difficulty.

By this combination of the framed timbers B B' C with the shell A, a tanning-vat is produced which is perfectly tight and which is capable of resisting a considerable pressure.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the iron bolts *c*, running through the planks *a* of the shell A, in combination with the tongues and grooves *b*, constructed and operating as and for the purpose described.

2. The arrangement of the framed timbers B B' C and bolts or stirrups *d d' e*, in combi-

nation with the shell A, as and for the purpose specified.

3. The lugs *l* under the timbers B^x, which pass over the man-holes, in combination with bolts *d^x*, as and for the purpose set forth.

JESSE S. WHEAT.

Witnesses:

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